Permit No. WA 000109-1
Issue Date: April 1, 2001
Expiration Date: April 1, 2006

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Georgia-Pacific West, Inc.
300 West Laurel
Bellingham, Washington

Plant Location	Receiving Water
300 West Laurel Bellingham, Washington	Bellingham Bay Water Quality Class A
Industry Type	**Discharge Location**
Bleached Sulfite Pulp and Paper Alcohol/lignin	Latitude 48°, 44', 05" N Longitude 122°, 30', 55" W

The above named corporation (Georgia-Pacific West) is authorized to discharge at the location described, in accordance with the special and general conditions contained herein.

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Carol P. Kraege, P.E.
Supervisor, Industrial Section
Department of Ecology

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GENERAL CONDITIONS

SUMMARY OF SCHEDULED PERMIT REPORT SUBMITTALS

Permit Section	Submittal	Frequency	First Submittal Date
S1.B.1	Outfall 009 Discharge Monitoring Report	Monthly	15th day of month
S1.B.1	Mercury Source Evaluation Sampling Plan	As Indicated	Within 90 days of permit effective date
S1.B.2	Bleach Plant Effluent Discharge Monitoring Report	Monthly	Begin April 16, 2001; 15th day of each month thereafter
S1.B.4	Dioxin and Chlorinated Organics Monitoring Report	As indicated	Within 30 days of receiving final test results
S1.C.	Effluent Priority Pollutant Scan	Annually	Prior to 1st of year
S1.D.	Sediment Sampling and Data Report	As indicated	Within 60 days of receiving final test results
S1.G.	Treatment Efficiency Study and Engineering Report	As indicated	November 1, 2001
S2.	Acute Toxicity Compliance Monitoring Reports	As indicated	Within 30 days of receiving final test results
S3.	Chronic Toxicity Compliance Monitoring Reports	As indicated	Within 30 days of receiving final test results
S5.C.	Solid Waste Control Plan	Update every permit cycle	Submit updated plan with permit renewal application
S6.	Outfall Evaluation	Once each permit cycle	Not later than 6 months before permit expiration
S7.	Treatment System Operating Plan	Once each permit cycle	Within 180 days of permit effective date
S8.	Spill Plan	Update annually	Update within 180 days of permit effective date; submit updates annually (prior to 1st of each year)
S9.	Slime Control Reporting	Annually	Prior to 1st of each year
S11.	Spent Pulping Liquor BMP Certification	Once	Within 90 days of permit issuance
S11.	BMP Monitoring and Corrective Action Reports per 40 CFR 430.03 (i)(4)	Annually	Prior to 1st of each year
G17.	Application for Permit Renewal	Once each permit cycle	At least 180 days prior to permit expiration

SPECIAL CONDITIONS

S1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Basis of Limitations

Production based effluent limitations for Georgia-Pacific West's pulp and paper mill discharges are derived from the following authorities:

* Best Practicable Control Technology Currently Available (BPT) as promulgated April 15, 1998 by the United States Environmental Protection Agency (EPA).

* Best Available Technology Economically Achievable (BAT) as promulgated April 15, 1998 by the EPA.

* New Source Performance Standards (NSPS) as promulgated April 15, 1998 by the EPA, for production increases above those for which limitations were established in the previous (1991) permit.

Based on the demonstrated highest "12-month average" production levels currently indicated through January 1999, Biochemical Oxygen Demand$_5$ and Total Suspended Solids effluent limitations are calculated below. Increased production introduced during the previous permit term is regulated under New Source Performance Standards.

Production Grade (Subcategory)	Production, Air Dry Tons/Day	Basis	BOD_5 Pounds/Ton Monthly Average	BOD_5 Pounds/Ton Maxim. Day	TSS Pounds/Ton Monthly Average	TSS Pounds/Ton Maxim. Day
Bleached Sulfite						
Surface Condenser	243	BPT	31.0	59.5	47.3	87.8
Barometric Condenser	322	BPT	33.8	65.0	56.2	104.4
Bleached Sulfite	84	NSPS	25.8	48	33.2	63.6
Total Production	649					

B. Process Wastewater Limitation and Monitoring Requirements

Georgia-Pacific West is authorized to discharge from the following listed outfalls, subject to the specified limitations and monitoring requirements. There shall be no discharge of floating solids or visible foam in other than trace amounts.

B.1 Outfall 009—

Parameter	Effluent Limitations: Monthly Average[a/]	Effluent Limitations: Daily Maximum[a/]	Monitoring Requirements: Frequency	Monitoring Requirements: Sample Type
Biochemical Oxygen Demand (5-day), lbs/day	20,587	39,417	Daily	24 hour composite, refrigerated
Total Suspended Solids, lbs/day	32,377	60,320	Daily	24 hour composite
Mercury, μg/L [c/]			Weekly	Grab
pH	5.0 to 9.0 [b/]	-	Continuous[e/]	Recording
Flow, MGD	-	-	Continuous	Recording
Temperature, °F	-	-	Continuous	Recording
AOX, μg/L [f/] (*adsorbable organic halides*)	-	< 20	Weekly	24 hour composite
Chemical Oxygen Demand, lbs/day	-	-	Weekly	24 hour composite, refrigerated
	Quarterly Maximum	Annual Average		
TCDD, mg/day [w/]	0.27 [x/]	0.14 [y/]	Quarterly	24 hour composite

a/ The monthly average is the average of daily values obtained over a month's time. The daily maximum is defined as the highest daily value for the same monthly period.

b/ Indicates the range of permitted values. Excursions between 4.0 and 10.0 shall not be considered violations, provided no single excursion exceeds 60 minutes in length, and total excursions do not exceed 7 hours and 26 minutes per month. Any excursions below 4.0 or above 10.0 shall be considered violations. The instantaneous maximum and minimum shall be reported monthly.

c/ Monitor once per week. The level of detection shall be a maximum of 0.2 μg/L. If the concentration of mercury equals or exceeds 5 times the required detection level (1 μg/L) daily sampling shall be initiated. If three successive daily mercury samples show concentrations that equal or exceed 5 times the required detection level (1 μg/L), then Georgia-Pacific West shall initiate mercury source evaluation sampling at the next scheduled sampling period (to determine the etiology of the mercury). The permit holder shall submit the results of the mercury source evaluation sampling to the Department in the next monthly report. Sampling shall return to the weekly frequency when three successive daily samples are at or below 0.2 μg/L. The final discharge shall be monitored for mercury using the EPA's "CVAA Method 245.1" or the EPA's "Method 1631, Revision B: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry".

Within 90 days of the issuance of this NPDES Permit, Georgia-Pacific West shall submit to the Department a mercury source evaluation sampling plan for review and approval. This plan shall, at a minimum, include sampling the following for mercury: ASB influent, and the ASB pond water and sludge at midcourse; the final effluent, the Mercury Recovery Unit (MRU) effluent, and the clear water sump effluent.

e/ Continuous means uninterrupted –except for brief lengths of time for calibration, power failure, or for unanticipated equipment repair or maintenance.

f/ This limit shall go into effect 12 months after permit issuance—and only for the specific month or months where the 12 month rolling average production of specialty grade pulps (produced, sold, or used for the production of end products such as plastic molding compounds, saturating and laminating products, and photographic papers) are below 25% of the total sulfite production for the same 12 month period. This limit is not in effect during those months when the 12 month average returns to or continues to be above the 25% of total production value.

w/ TCDD – Acronym for 2,3,7,8-tetrachlorodibenzo-p-dioxin.

x/ Quarterly Maximum – This limit is in effect after April, 2001, when the pulp bleaching process modifications are complete. The monitoring requirement is in effect at issuance of this permit. For permit compliance purposes, the point of compliance shall be defined as the final effluent before discharge. Compliance with the permit limit shall be demonstrated by direct mass loading calculation for final effluent, with a detection equal to or greater than the EPA specified minimum level (ML) of 10 picograms/L (as defined in 40 CFR 430.01(i)). When sample measurements fall below the ML, the loading shall be calculated using a concentration value of zero. When sample measurements fall above the ML, the loading shall be calculated using the measured concentration.

y/ Annual Average – This limit is in effect after April, 2001, when the pulp bleaching process modifications are complete. Average values shall be calculated as follows: measurements below the Method Detection Limit = 0; measurements greater than the MDL = the measurement.

B.2 Bleach plant effluent—

Except as noted, the point of compliance for this section of parameters is the Bleach Plant Effluent and the sample type is 24 hour composite, per 40 CFR Part 430 Subpart E. Bleach plant effluent flow and production, corresponding to the sampling of the below listed pollutants, shall be monitored, and the results reported, within the monthly report.

CAS Number	Pollutant	Daily Maximum	Monitoring Frequency	Point of Compliance
1198556	Tetrachlorocatechol	< 5.0 μg/L [a/]	Monthly	Bleach Plant Effluent
2539175	Tetrachloroguaiacol	< 5.0 μg/L [a/]	Monthly	Bleach Plant Effluent
2539266	Trichlorosyringol	< 2.5 μg/L [a/]	Monthly	Bleach Plant Effluent
2668248	4,5,6-trichloroguaiacol	< 2.5 μg/L [a/]	Monthly	Bleach Plant Effluent
32139723	3,4,6-trichlorocatechol	< 5.0 μg/L [a/]	Monthly	Bleach Plant Effluent

CAS Number	Pollutant	Daily Maximum	Monitoring Frequency	Point of Compliance
(continued)		(continued)		(continued)
56961207	3,4,5-trichlorocatechol	< 5.0 µg/L [a/]	Monthly	Bleach Plant Effluent
57057837	3,4,5-trichloroguaiacol	< 2.5 µg/L [a/]	Monthly	Bleach Plant Effluent
58902	2,3,4,6-tetrachlorophenol	< 2.5 µg/L [a/]	Monthly	Bleach Plant Effluent
60712449	3,4,6-trichloroguaiacol	< 2.5 µg/L [a/]	Monthly	Bleach Plant Effluent
87865	Pentachlorophenol	< 5.0 µg/L [a/]	Monthly [b/]	Bleach Plant Effluent
88062	2,4,6-trichlorophenol	< 2.5 µg/L [a/]	Monthly [b/]	Bleach Plant Effluent
95954	2,4,5-trichlorophenol	< 2.5 µg/L [a/]	Monthly [b/]	Bleach Plant Effluent
1746016	TCDD	< 10 pg/L [c/]	Monthly	Bleach Plant Effluent
51207319	TCDF	< 10 pg/L [c/]	Monthly	Bleach Plant Effluent

a/ This concentration represents the minimum level (as defined in 40 CFR 430.01(i)) for this pollutant. Analysis for the chlorinated phenolics shall be conducted using EPA Method 1653 as indicated in the Federal Register, April 15, 1998. Georgia-Pacific West must achieve a minimum level less than or equal to that listed. For purposes of reporting, if a value is less than the minimum level, the Permittee shall report the actual value detected. If a value is less than the method detection level, the Permittee shall report: "less than (the method detection level in its numerical format)".

b/ If Georgia-Pacific West has not certified to the department that biocides containing chlorophenolics are not used, then the monitoring frequency shall be weekly.

c/ TCDD is defined as 2,3,7,8-tetrachlorodibenzo-p-dioxin and TCDF is defined as 2,3,7,8-tetrachlorodibenzofuran. The above listed concentration represents the minimum level (as defined in 40 CFR 430.01(i)) for this pollutant. Analysis, including sample containers and QA/QC, shall be conducted in accordance with Method 1613: Tetra- through Octa- Chlorinated Dioxins and Furans by Isotopic Dilution HRGC/HRMS, USEPA Office of Water, Engineering and Analysis Division, Revision A or an approved equivalent. Georgia-Pacific West must achieve a detection level less than or equal to 10 pg/L.

Georgia-Pacific West plans to employ oxygen delignification (OD) plus elemental chlorine-free (ECF) bleaching as the primary pulp bleaching process, after April 15, 2001. Two years after the startup of the OD/ECF bleaching process, the Department will evaluate the bleach plant effluent chloroform and the final effluent AOX monitoring data to determine whether establishing limits for chloroform and AOX is practicable. The Department will open the permit to include chloroform bleach plant effluent limits and AOX final effluent limits, if the evaluation indicates it is feasible to develop limitations from the monitoring data. Ecology would also open the permit if the EPA promulgates effluent guidelines that include BAT for chloroform and/or AOX limitations for specialty grade sulfite pulp.

B.3 Chlor/alkali plant MRU effluent—

The monthly average mass for total mercury discharge in the Mercury Recovery Unit (MRU) effluent shall not exceed 0.03 lbs./day. The highest daily average concentration shall not exceed 25 micrograms per liter. Georgia-Pacific West shall continuously monitor the MRU effluent for Hg during discharge

periods. The point of compliance for this section of parameters is the MRU effluent, before mixing with other discharge streams. Reporting for this requirement shall be as specified under Agreed Order number DE TC99 I035.

B.4 Dioxin and chlorinated organics monitoring requirements—

Georgia-Pacific West shall, upon the issuance of the permit, conduct an effluent and sludge monitoring program in accordance with the following requirements:

	Parameter	Frequency[1/]	Sample Type[2/]
Mill Effluent:			
	TCDD[3/]	Quarterly	24-hour composite
	TCDF[3/]	Quarterly	24-hour composite
	AOX[4/]	1/week	24-hour composite
Sludge[5/,6/]:			
	TCDD	Semi-Annually	grab
	TCDF	Semi-Annually	grab
Bleach Plant Effluent:			
	Chloroform[7/]	Quarterly	24-hour composite[8/]

1/ Effluent samples shall be taken on the same day as the sludge samples are taken. Sampling for AOX shall also coincide with that for TCDD and TCDF.

2/ Sampling of TCDD and TCDF shall be per Appendix B of the US EPA/Paper Industry Cooperative Dioxin Screening Study (EPA 440/1-88-025, March 1988).

3/ TCDD is defined as 2,3,7,8-tetrachlorodibenzo-p-dioxin and TCDF is defined as 2,3,7,8-tetrachlorodibenzofuran. The above listed concentration represents the minimum level (as defined in 40 CFR 430.01(i)) for this pollutant. Analysis including sample containers and QA/QC shall be conducted in accordance with Method 1613: Tetra- through Octa- Chlorinated Dioxins and Furans by Isotopic Dilution HRGC/HRMS, US EPA Office of Water, Engineering and Analysis Division, Revision A or an approved equivalent. Georgia-Pacific West must achieve a detection level less than or equal to 10 pg/L.

4/ AOX is defined as adsorbable organic halides. Analysis shall be conducted in accordance with Method 1650: Adsorbable Organic Halides by Adsorption and Coulometric Titration, Appendix A to Part 430 CFR, April 15, 1998. Georgia-Pacific West shall report the date sampled, AOX concentration (ppm), effluent flow (MGD), AOX kg/day, and daily bleached pulp production (ADMT).

5/ Sludge is defined as primary treatment and secondary treatment bottom residue.

6/ Analysis of sludge samples and QA/QC, shall be conducted in accordance with Method 8290, Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry

(HRGC/HRMS), SW-846, Test Methods for Evaluating Solid Waste, US EPA, Office of Solid Waste, September, 1994.

7/ Analysis for chloroform shall be conducted in accordance with EPA Method 624 or equivalent. Georgia-Pacific West shall report the date sampled, chloroform concentration (ppm), bleach plant effluent flow (MGD), lbs/day chloroform, and daily bleached pulp production (ADMT).

8/ The twenty four hour composite sampling for chloroform shall consist of a minimum of four individual samples collected during a twenty four hour period and quantitatively composited in the laboratory. Georgia-Pacific West shall include a detailed description of the method used to composite the samples with the first report, and with subsequent reports if the compositing method has been modified. If an automated continuous or grab compositing device is used, the report shall include a description of the system and the name of the manufacturer.

B.5 Production monitoring—

Total monthly sulfite pulp production shall be reported. Total pulp production shall be reported as air dried tons (10% moisture). Also, Georgia-Pacific West shall report its total monthly production of specialty grade pulps that were produced, sold, or used for the production of end products such as plastic molding compounds, saturating and laminating products, and photographic papers. Specialty grade pulps shall be reported as air dried tons (10% moisture) of grades Puget Alpha 92, Puget Ultra, Puget Plus, and Puget Prime production off the pulp dryer. Upon Ecology inspectors' request, Georgia-Pacific West shall provide access, on site, to records of specialty grade product sales to confirm compliance with this requirement.

B.6 TCF Feasibility analysis—

Within 36 months of permit issuance, Georgia-Pacific West shall submit to the department, a comprehensive analysis of converting to a totally chlorine free (TCF) bleaching process. This analysis shall include complete technology conversion description, itemized costs to convert, detailed market outlook/viability for TCF product. The analysis shall specify the capital cost to convert, and the predicted product sales impacts and long term economic viability, resulting from the conversion.

C. Priority Pollutant Scan

Georgia-Pacific West shall analyze final mill effluent at least annually for 4 methylphenol and the priority pollutants identified in EPA Form 3510-2C part C.

D. Sediment Evaluation

Georgia-Pacific West shall submit a Sediment Sampling and Analysis Plan I (for baseline sediment monitoring) to the Department, for evaluation and approval, within 30 days of the permit issuance date, unless this plan has been approved by the Department prior to issuance of this permit. The purpose of the plan is to characterize sediment quality in the vicinity of the Permittee's discharge locations. The

plan shall include criteria for determining the need for further sampling and analysis. The Sediment Sampling and Analysis Plan shall follow the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology, 1995) and updated with the Puget Sound Estuary Program Protocols.

Following Department approval of the Sediment Sampling and Analysis Plan I, and within 1 year of said approval, sediments will be collected and analyzed. Georgia-Pacific West shall submit a Sediment Data Report conforming with the approved Sampling and Analysis Plan and the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology, 1995) and Puget Sound Estuary Program Protocols. Within 60 days of receiving final test results, Georgia-Pacific West shall submit to the Department the Sediment Data Report containing the sediment sampling and analysis results.

Georgia-Pacific West shall also submit to the Department for review and approval, a Sediment Sampling and Analysis Plan II (for sediment monitoring), at least 180 days prior to permit expiration. The purpose of the plan is to characterize sediment quality in the vicinity of the Permittee's discharge locations after closure of the chlor-alkali plant. The plan shall include criteria for determining the need for further sampling and analysis. The Sediment Sampling and Analysis Plan shall follow the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology, 1995) and updated with the Puget Sound Estuary Program Protocols.

Within 180 days of Department approval of the Sediment Sampling and Analysis Plan II, sediments will be collected and analyzed. Georgia-Pacific West shall submit a Sediment Data Report conforming with the approved Sampling and Analysis Plan and the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology, 1995) and Puget Sound Estuary Program Protocols. Within 60 days of receiving final test results, Georgia-Pacific West shall submit to the Department a Sediment Data Report containing the sediment sampling and analysis results.

E. Mixing Zone

A Dilution Ratio Study conducted in February 1994, in accordance with WAC 173-201A-100 determined dilution values as 57 to 1 for the acute zone, and 140 to 1 for the chronic zone.

A Dilution Ratio Study update, to account for anticipated reductions in effluent flow, shall be submitted for approval to the Department after Jan. 1, 2002, and at least 18 months prior to permit expiration.

F. Stormwater Allowance

Georgia-Pacific West is authorized to receive, for discharge through the treatment system, stormwater from the mill plant site. The Permittee is also authorized to receive and discharge through the treatment system, stormwater from its adjacent property between Whatcom Waterway and Cornwall Avenue, and from the 8 acres of impervious surface at the 250,000sq/ft "Tissue" warehouse site adjacent to the secondary treatment lagoon.

G. Treatment Efficiency Study and Engineering Report

Georgia-Pacific West shall conduct chemical analyses of influent and effluent samples from several points within the wastewater treatment system, to determine treatment and removal efficiencies. Influent and effluent samples shall be collected from the following points:

1) a sampling point upstream of, but as near as possible to, the primary clarifier ,
2) effluent from the primary clarifier,
3) influent to aeration basin,
4) the aeration basin effluent,
5) the clearwater sump effluent,
6) other points as directed/approved by Ecology

At the time of sampling, the flow through the treatment units shall be monitored and recorded. Acceptable methods of monitoring shall include: in pipe metering, measuring dye concentrations, or any other method approved by Ecology.

Specific influent and effluent sampling points shall be identified on a flow diagram of the wastewater treatment system. The flow diagram shall identify all extraneous wastewater streams to the individual treatment units, including recycle streams. The sample points shall be selected to be representative of each wastewater stream without the influence of recycle streams. The flow monitoring method and monitoring points shall also be identified for each treatment system (process, stormwater, and domestic). This information shall be submitted to Ecology **before January 1, 2002**.

Georgia-Pacific West may submit existing data on internal waste streams for substitution or partial substitution of the following sampling requirements. Existing data shall be submitted for Ecology review **before January 1, 2002**. The data submittal shall include a discussion of the sampling point and methods used to ensure that the data is representative. Ecology will then make a determination on the usability of the data and any subsequent sampling required.

Influent and effluent sampling shall be conducted during six separate intervals after January 1, 2002 and before June 1, 2003. Three of the sampling intervals shall be conducted when the effluent plant is **primarily** processing dry weather flow; the other three intervals shall be conducted when the effluent plant is treating wet weather flow. Minor precipitation events during the dry weather sampling are not expected to impact the data significantly but should be recorded if they occur. Sampling intervals shall be spaced at least one month apart.

Samples shall be collected when the wastewater treatment system is in a relatively steady state. The timing shall be such that the effluent samples from each point correspond to the upstream influent samples and the resultant analytical results can be effectively used to estimate removal efficiencies across the applicable portions of the treatment system.

The following table summarizes the monitoring required to evaluate the efficiency of the treatment system:

Sampling Requirements	Wet Weather Flow Intervals			Dry Weather Flow Intervals		
	1	2	3	4	5	6
Full suite of parameters at locations 1,2,3,4,5 with automated 24-hour composite sampler	1 set*			1 set		
BOD_5 and TSS **automated** 24-hour composite samples at locations 1,2,3,4,5	3 sets	3 sets	3 sets	3 sets	3 sets	3 sets

* "Set" is defined as one sample collected at each of the identified sampling points.

During one wet and one dry weather interval, samples from locations 1,2,3,4,5 shall be analyzed for the complete priority pollutant scan excepting acids, base neutrals, and volatiles. Of the priority pollutant volatiles, chloroform shall be included. The preceding analyses correspond to the "full suite" designation in the above table.

Full suite analyses for this study may be done in conjunction with yearly priority pollutant scans also required by the permit wherever the timing is appropriate.

During the same wet and dry weather sampling intervals that samples are collected for full suite analysis, **three additional sets of composite samples** shall be collected during each sampling interval at locations 1,2,3,4,5 and analyzed for **BOD_5 and TSS**.

Georgia-Pacific West shall also conduct sampling during four other intervals (two wet weather, and two dry weather, as identified above). During each interval, three sets of composite samples shall be collected at sample locations 1,2,3,4,5 and analyzed for BOD_5, and TSS.

Sample analysis shall be conducted in accordance with 40 CFR 136 and/or Standard Methods for the Examination of Water and Wastewater, 18th edition, 1992, or updated versions thereof. Georgia-Pacific West shall follow the quality assurance procedures in 40 CFR 136 and/or Standard Methods for the Examination of Water and Wastewater, 18th edition, 1992 or updated versions thereof.

Georgia-Pacific West shall also prepare an engineering report on the wastewater treatment system, in accordance with **Chapter 173-240 WAC** and include the following elements:

1. A schematic of the treatment units.

2. Data showing flow through the treatment units, including recycle streams, for the past 2-3 years. Flow data shall be presented in terms of average dry weather flow, average monthly flow of the maximum month, and peak hourly flow. If flow-monitoring data is not available for wastewater streams, then Georgia-Pacific West shall provide an estimate, stating the estimation method used.

3. Basic design data and sizing calculations for each unit in the wastewater treatment system. Clarifier information should include detention times, overflow rates, solids and weir loading rates, volume and depth. Aeration basin information shall include hydraulic detention time, volumetric loading, sludge depth, and sludge residence time. This information shall be provided for design criteria parameters -- BOD, TSS, where applicable.

4. An analysis of current treatment, removal efficiencies, and operating conditions for each treatment unit (based on information collected in the treatment efficiency study, above).

5. Predicted design capacities, including hydraulic and organic loading for each wastewater treatment unit, under the flow conditions described above in (2). The predicted design capacities shall be based on information collected during the study, on the previous 2-3 years of flow data, and on any additional relevant information collected by Georgia-Pacific West.

6. Predicted effluent wastewater characteristics at design flows.

The engineering report shall be submitted to the Department for review and approval by November 1, 2003.

By May 1, 2004, Georgia-Pacific West shall submit an analysis to the Department that compares current conditions within the mill to the predicted design capacity of the wastewater treatment system, as determined in the approved engineering report. The analysis shall also predict the next permit term's production increases and the resultant impacts to wastewater treatment system capacity. The report shall include a discussion of any production increases, changes to raw materials, modifications to process units, changes in additives, etc., that could potentially cause a change in wastewater characteristics.

H. Chip Management

Georgia-Pacific West shall develop and adhere to a chip management plan that will reduce and prevent chip spillage, at or near the docks of the mill, into the waters of the state.

S2. ACUTE TOXICITY

A. Salmonid Bioassay

Starting at permit issuance and ending May 31, 2002 there shall be a bioassay limit of 80 percent survival of Salmonid fishes in a minimum of 65% concentration of treated effluent for a period of 96-hours. These tests shall be conducted on a semi-annual basis by Georgia-Pacific West, using the protocol specified below (or a pre-approved equivalent). The tests shall be scheduled six months apart. Each of these tests must be performed during full and/or normal operation of the pulp and paper mill. This condition shall expire when Whole Effluent Toxicity Characterization begins.

If a semi-annual bioassay test fails to have 80% survival in 65% effluent for a 96-hour period, bioassays shall be conducted once a month for three consecutive months. All three of these tests must pass before Georgia-Pacific West may revert back to the semi-annual schedule. Georgia-Pacific West shall notify the Department if additional testing is to be conducted.

The bioassays shall be conducted in accordance with the following protocol: Biological Testing Methods, Part A, Static Acute Fish Toxicity Test, DOE 80-12, 1991 (or latest revision thereof).

B. Effluent Characterization

Starting June, 2001 Georgia-Pacific West shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. The three acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization. Effluent characterization for acute toxicity shall be conducted every other month for one year.

Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/ quality control procedures specified in this Section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported. A written report shall be submitted to the Department within 60 days after the sample date.

A final Effluent Characterization Summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This Summary report shall include tabulations of the individual test results, as well as any information (developed during the period of testing) about the sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability.

Acute toxicity tests shall be conducted with the following species and protocols:

1) Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F)
2) Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA/600/4-90/027F). Georgia-Pacific West shall choose one of the three species and use it consistently throughout effluent characterization.
3) Rainbow trout, *Oncorhynchus mykiss* (96 hour static-renewal test, method: EPA/600/4-90/027F).

C. Effluent Limit for Acute Toxicity

After completing one year of effluent characterization, Georgia-Pacific West has an effluent limit for acute toxicity if either of the following conditions exists:

(1) The median survival of any species in 100% effluent is below 80%, or
(2) Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required at the end of one year as a result of effluent characterization (subsection B), Georgia-Pacific West shall immediately complete all applicable requirements in subsections D, E, and G.

If no effluent limit is required at the end of one year, as a result of effluent characterization (subsection B), then Georgia-Pacific West shall complete all applicable requirements in subsections F and G.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration of 1.7% effluent.

In the event of failure to pass the test (described in section S2, subsection D, below) for compliance with the effluent limit for acute toxicity, Georgia-Pacific West is considered to be in compliance with all

permit requirements for acute whole effluent toxicity as long as the requirements in subsection E are being met to the satisfaction of the Department.

Acute Critical Effluent Concentration (ACEC) means that a 1.7% effluent concentration is the maximum concentration of effluent allowed, during critical conditions, at the boundary of the zone of acute criteria exceedance assigned pursuant to **WAC 173-201A-100**. The zone of acute criteria exceedance is authorized in section S1, subsection E of this permit.

D. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring, to determine compliance with the effluent limit, shall be conducted quarterly for the remainder of the permit term. Georgia-Pacific West shall use each of the species listed in subsection B (above) on a rotating basis, and using—at a minimum—100% effluent, a 1.7% effluent concentration, and a control, for the toxicity tests. Georgia-Pacific West shall schedule the toxicity tests in the order listed in the permit, unless the Department notifies the Permittee (in writing) of another species rotation schedule. The percentage of survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means monitoring shows no statistically significant difference in survival between the control and the test concentration representing the ACEC. Georgia-Pacific West shall immediately implement subsection E. if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

E. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If Georgia-Pacific West can not comply with the acute toxicity limit in subsection C, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks, using the same test and species as the failed compliance test. Testing shall determine the LC_{50} and effluent limit compliance. Georgia-Pacific West shall return to the original monitoring frequency in subsection D, after completion of the additional compliance monitoring.

If Georgia-Pacific West believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that Georgia-Pacific West intends to take only one additional sample for toxicity testing, and will wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result; it shall also identify the Permittee's reason for considering the compliance test result to be anomalous. Georgia-Pacific West shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed, without delay, to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result, upon determination by the Department that the compliance test result was anomalous.

If all of the additional monitoring—conducted in accordance with this subsection—complies with the permit limit, Georgia-Pacific West shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) Based upon the search results, Georgia-Pacific West shall submit a report to the Department identifying possible causes—and preventive measures—for the transient toxicity event that triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit, during the additional compliance monitoring, Georgia-Pacific West shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days after test results are final. The TI/RE plan shall be based **on WAC 173-205-100(2)** and shall be implemented in accordance with **WAC 173-205-100(3)**.

F. Monitoring When There Is No Permit Limit for Acute Toxicity

Georgia-Pacific West shall test final effluent once in the last summer, and once in the last winter, prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization (or substitutes approved by the Department) shall be used and the results submitted to the Department as a part of the permit renewal application process.

G. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* with regard to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides toxicity test data on floppy disk for electronic entry into the Department's database, then Georgia-Pacific West shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius, while being collected, and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible, but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*, or most recent version thereof.

4. All toxicity tests shall meet the quality assurance criteria and test conditions published in the most recent versions of the EPA manual listed in subsection A, and in Ecology's Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined by the Department to be invalid or anomalous, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection B. or pristine natural water of sufficient quality for good control performance.

6. The Whole Effluent Toxicity tests shall be run on an unmodified sample of final effluent.

7. Georgia-Pacific West may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include a 1.7% effluent concentration (the ACEC).

8. All Whole Effluent Toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% (as defined in **WAC 173-205-020**), must be repeated on a fresh sample with an increased number of replicates to increase the power.

S3. CHRONIC TOXICITY

A. Bivalve/Echinoderm Monitoring

Starting at permit issuance and ending May 31, 2001, Georgia-Pacific West shall conduct chronic toxicity tests every third month (quarterly), alternating species between Pacific oyster or Mussel, and Sea urchin or Sand dollar. The tests shall be conducted using the protocols referenced in subsection B. Testing shall begin within 30 days of the permit effective date. A written report shall be submitted to the Department within 60 days after each sample date.

B. Effluent Characterization

After Georgia-Pacific West achieves compliance with the bleach plant effluent requirements in section S1, subsection B.2, the Permittee shall conduct chronic toxicity testing on the final effluent. The three chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall begin after April 15, 2001. A written report shall be submitted to the Department within 60 days after the sample date. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability that Georgia-Pacific West developed during the period of testing.

Effluent testing for chronic toxicity shall be conducted every other month for one year. Georgia-Pacific West shall conduct chronic toxicity testing during effluent characterization, on a series of at least five concentrations of effluent, in order to determine appropriate point estimates. This series of dilutions shall include a 1.7% effluent dilution (the ACEC). Georgia-Pacific West shall compare the 1.7% effluent dilution result to the control, using hypothesis testing at the 0.05 level of significance, as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the three species categories—numbered 1, 2, and 3 below—and the most recent version of the following protocols:

Saltwater Chronic Toxicity	Test Species	Method
Category 1.		
Topsmelt or Silverside minnow	*Atherinops affinis* or *Menidia beryllina*	EPA/600/R-95/136 or EPA/600/4-91/003
Or		
Mysid shrimp	*Holmesimysis costata* or *Mysidopsis bahia*	EPA/600/R-95/136 or EPA/600/4-91/003
Category 2.		
Pacific oyster or Mussel	*Crassostrea gigas* or *Mytilus sp.*	EPA/600/R-95/136
Category 3.		
Sea urchin or Sand dollar	*Strongylocentrotus purpuratus* or *Dendraster excentricus*	EPA/600/R-95/136

Georgia-Pacific West shall use the West Coast fish (topsmelt, *Atherinops affinis*) and mysid (*Holmesimysis costata*) for toxicity testing unless the lab cannot obtain a sufficient quantity of a West Coast species in good condition--in which case, the East Coast fish (silverside minnow, *Menidia beryllina*) or mysid (*Mysidopsis bahia*) may be substituted.

The Pacific oyster and mussel tests shall be run in accordance with EPA/600/R-95/136 and the bivalve development test conditions in the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof. The laboratory shall use whichever one of the two species that will give a valid result in each particular test.

The sea urchin and sand dollar (echinoderm) test shall be run in accordance with EPA/600/R-95/136 and the echinoderm fertilization test conditions in the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria,* or the most recent version thereof. The laboratory shall use whichever one of the two species that will give a valid result in each particular test.

C. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the 1.7% effluent concentration at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections D, E, and G.

If no significant difference is shown between the 1.7% effluent concentration and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections F and G apply.

The effluent limit for chronic toxicity is **no toxicity detected in a test concentration of 0.7% effluent.**

In the event of failure to pass the test described in section S3, subsection D for compliance with the effluent limit for chronic toxicity, Georgia-Pacific West is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection E are being met to the satisfaction of the Department.

The 0.7% effluent concentration is the CCEC (chronic critical effluent concentration), which means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1 of this permit, pursuant to **WAC 173-201A-100**.

D. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted 6 times per year (every other month) for the remainder of the permit term using the two most sensitive species from the effluent characterization study in subsection B above, on a rotating basis and performed using at a minimum a 1.7% effluent concentration (the ACEC), a 0.7% effluent concentration (the CCEC), and a control. Georgia-Pacific West shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee, in writing, of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the 0.7% effluent concentration. Georgia-Pacific West shall immediately implement subsection E, if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the 0.7% effluent concentration using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the 0.7% effluent concentration is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, Georgia-Pacific West shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the 1.7% effluent concentration and the control.

E. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection D. determines a statistically significant difference in response between the CCEC and the control, Georgia-Pacific West shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly, for three consecutive months, using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations, and a control, in order to be able to determine appropriate point estimates. One of these effluent concentrations shall be at 0.7% effluent and must be compared statistically to the nontoxic control, in order to determine compliance with the effluent limit for chronic toxicity as described in subsection D. Georgia-Pacific West shall return to the original monitoring frequency in subsection D, after completion of the additional compliance monitoring.

If Georgia-Pacific West believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that Georgia-Pacific West intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. Georgia-Pacific West shall complete all of the additional monitoring required in this subsection, as soon as possible, after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then Georgia-Pacific West shall proceed, without delay, to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result, upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring, conducted in accordance with this subsection, complies with the permit limit, Georgia-Pacific West shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) Based upon the search results, Georgia-Pacific West shall submit a report to the Department identifying possible causes—and preventive measures—for the transient toxicity event that triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, Georgia-Pacific West shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department, within 60 days after test results are final. The TI/RE plan shall be based on **WAC 173-205-100(2)** and shall be implemented in accordance with **WAC 173-205-100(3)**.

F. Monitoring When There is No Permit Limit for Chronic Toxicity

Georgia-Pacific West shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial chronic effluent characterization, or substitutes approved by the Department, shall be used; and the results shall be submitted to the Department as a part of the permit renewal application process.

G. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk, for electronic entry into the Department's database, then Georgia-Pacific West shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius, while being collected, and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible, but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements, as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or the most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection B. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined by the Department to be invalid or anomalous, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection B or pristine natural water of sufficient quality for good control performance.

5. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

6. Georgia-Pacific West may choose to conduct a full dilution series test, during compliance monitoring, in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include a 1.7% effluent concentration and a 0.7% effluent concentration.

7. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S4. **MONITORING AND REPORTING**

Georgia-Pacific West shall monitor and report in accordance with the following conditions:

A. Reporting

Georgia-Pacific West shall submit a quarterly report of all dioxin/furan monitoring results required by the Permit. If a result is less than the 10 ppq (parts per quadrillion) minimum level, the Permittee shall report the actual value detected. If the result is less than the method detection level, the Permittee shall report "less than (the numerical value of the method detection level)".

Monitoring results obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department. In addition, a summary sheet—listing daily results for the applicable parameters, Method Detection Limits, and Quantification Limits (when applicable), shall be submitted to the department. The report and summary sheet shall be sent to the Department of Ecology, Industrial Section, P. O. Box 47706, Olympia, Washington 98504-7706. Monitoring shall be started on the effective date of the permit and the first report is due on the 15th day of the following month. Monitoring results obtained during the month shall be summarized on the Discharge Monitoring Report (DMR) Form (EPA 3320-1) and submitted no later than the 15th day of the following month, unless otherwise specified in this permit.

B. Records Retention

Georgia-Pacific West shall retain records of all monitoring information—including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit—for a period of at least 3 years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by Georgia-Pacific West, or when requested by the Director (or the Director's duly authorized delegate).

C. Recording Results

For each measurement or sample taken, Georgia-Pacific West shall record the following information: (1) the date, exact place, and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Representative Sampling

Samples and measurements taken to meet the requirements of this permit, shall be representative of the volume and nature of the monitored discharge; this requirement includes representative sampling of any unusual discharge or discharge condition (bypasses, upsets, and maintenance-related conditions affecting effluent quality). After a portion of the composite sample is removed for Georgia-Pacific West's analysis, the remainder of the sample—a 4-8 liter minimum—shall be retained until noon. This sample shall be kept refrigerated at 4^{o} centigrade, in the dark.

E. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants*, contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by the Department.

F. Flow Measurement

Appropriate flow measurement devices and methods, consistent with accepted scientific practices, shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with the manufacturer's recommendations—or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

G. Laboratory Accreditation

All monitoring data—other than flow, temperature, settlable solids, conductivity, pH, and internal process control parameters—shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, **Chapter 173-50 WAC**. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Soils and hazardous waste data are exempted from this requirement, pending the Department's accreditation of laboratories

for analysis of these media.

H. Additional Monitoring by Georgia-Pacific West

If Georgia-Pacific West monitors any pollutant more frequently than required by this permit (S1), using test procedures specified by Condition S4 subsection E, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

I. Signatory Requirements

All applications, reports, or written information submitted to the Department shall be signed and certified in accordance with the provisions of 40 CFR Part 122.22.

1. Applications. All permit applications shall be signed by either a principal executive officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.

2. Reports. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
   a. The authorization is made in writing, by a person described above, and submitted to the Department, and
   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility (such as the position of plant manager, the superintendent, or a position of equivalent responsibility,) or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

3. Changes to authorization. If an authorization under paragraph I.2.b is no longer accurate because a different individual or position has the requisite responsibility, a new authorization satisfying the requirements of I.2.b must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

> "I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons managing the system, or of those persons directly responsible for gathering the information, such information submitted is—to the best of my knowledge and belief—true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

J. Sample Dechlorination

Georgia-Pacific West shall not dechlorinate any effluent samples prior to conducting WET testing.

S5. SOLID WASTE DISPOSAL

A. Solid Waste Handling

Georgia-Pacific West shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

Georgia-Pacific West shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment; nor shall the Permittee allow such leachate to cause violations of the State Surface Water Quality Standards, **Chapter 173-201A WAC**, or the State Ground Water Quality Standards, **Chapter 173-200 WAC**. The Permittee shall apply for a permit, or permit modification, as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

Georgia-Pacific West submitted a solid waste control plan, that was subsequently approved by the Department. This plan includes all solid wastes, with the exception of those solid wastes regulated by Chapter 173-303 WAC (Dangerous Waste Regulations). The plan includes—at a minimum—a description, source, generation rate, and disposal methods for such solid wastes. This plan shall not be at variance with any approved local solid waste management plan. The Permittee shall comply with the plan, and with any modifications thereof as are approved by the Department. Georgia-Pacific West shall submit a plan update with any application for permit renewal, 180 days prior to expiration of this permit.

S6. OUTFALL EVALUATION

Georgia-Pacific West shall inspect the submerged portion of the outfall line and diffuser to evaluate and document its integrity. If conditions allow for a photographic verification, it shall be included in a report summarizing outfall inspection results, that Georgia-Pacific West submits to the Department. The outfall inspection report shall be submitted to the Department no later than six months prior to permit expiration.

S7. TREATMENT SYSTEM OPERATING PLAN

Wastewater treatment systems shall be operated according to procedures and criteria described in an operating plan. This plan shall be prepared/updated and submitted to the Department, for evaluation and approval, within 180 days of the issuance date of this permit. The plan shall include, but is not limited to, the following:

- A baseline operating condition description of the operating parameters and procedures used to meet the effluent limitations of S1, at the production levels used in developing these limitations.
- The plan shall describe alternate operating procedures and conditions needed to maintain design treatment efficiency in the event that production levels drop below the baseline levels used to establish these limitations. Monitoring and reporting changes shall also be described in the plan.

- A description of any regularly scheduled maintenance or repair activities at the permitted facilities, which would affect the volume or character of the wastes discharged; a list, including quantities and chemical compositions, of any maintenance-related substances (such as cleaners, degreasers, solvents, etc.) that will be discharged; and a plan for monitoring and treating/controlling the discharge of maintenance-related materials.

- This plan shall be updated to include requirements for any major modifications of the treatment system.

- At lower production levels, Georgia-Pacific West shall operate the treatment system to meet its optimum design efficiency.

S8. SPILL CONTROL PLAN

Georgia-Pacific West shall annually update its existing Spill Control Plan—subject to Departmental approval—for the prevention, containment, and control of spills or unplanned discharges of:

1) oil and petroleum products,
2) materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth **in WAC 173-303-070**, or
3) other materials which may become pollutants or cause pollution upon reaching state's waters.

Georgia-Pacific West shall follow the plan, and any supplements, throughout the term of permit. An updated Spill Control Plan shall be submitted to the Department, for Ecology's evaluation and approval, within six months of the issue date of this permit.

The updated spill control plan shall include the following:

- A description of the reporting system which will be used to alert responsible managers and legal authorities, in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- A list of all oil and chemicals used/processed/stored at the facility that may spill into state waters.

For purposes of meeting this requirement, Georgia-Pacific West may submit plans and manuals required by 40 CFR Part 112, and contingency plans required by **Chapter 173-303 WAC**.

S9. SLIME CONTROL REPORTING

In-plant slime control methods and materials shall be reported in detail, annually, giving the description, amount, and periods of application of each slimicide used. Any deviation from these techniques shall be reported as soon as practicable.

S10. REOPENER CLAUSE

The Department may reopen and revise or amend this permit, if needed to coordinate with issues raised in the watershed/geographic analysis process.

S11. **SPENT PULPING LIQUOR BEST MANAGMENT PRACTICE (BMP)**

Georgia-Pacific West shall, upon the date of issuance of this permit, be in compliance with Federal regulation 40 CFR 430.03 (j)(1) (i), (ii), and (iii) [listed below]. Georgia-Pacific West shall also be in compliance with Federal regulation 40 CFR 430.03 (j)(1) (iv), (v), and (vi) before their specified deadlines.

These Best Management Practice requirements are as follows:

(i) Prepare BMP Plans and certify to Ecology that the BMP Plan has been prepared in accordance with this regulation.

(ii) Implement all BMPs specified in paragraph (c) of 40CFR 430.03 that do not require the construction of containment or diversion structures, or the installation of monitoring and alarm systems.

(iii) Establish initial action levels required by paragraph (h)(3) of 40CFR 430.03.

(iv) Commence operation of any new or upgraded continuous, automatic monitoring systems that the mill's operators determine to be necessary, under paragraph (c)(3) of 40 CFR 430.03 (other than those associated with construction of containment or diversion structures) not later than April 17, 2000.

(v) Complete construction and commence operation of any spent pulping liquor, collection, containment, diversion, or other facilities, including any associated continuous monitoring system, necessary to fully implement BMPs specified in paragraph (c) of 40CFR 430.03 not later than April 16, 2001.

(vi) Establish revised action levels required by paragraph (h)(4) of 40CFR 430.03 as soon as possible after fully implementing the BMPs specified in paragraph (c) of 40CFR 430.03, but not later than January 15, 2002.

Georgia-Pacific West shall be in compliance with Federal regulation 40 CFR 430.03 (i), April 1998; and shall submit such requisite reports to fulfill this requirement [40 CFR 430.03 (i)(4)] prior to January 30th of each year.

S12. **SHORT-TERM WATER QUALITY VARIANCE**

The Georgia-Pacific West may perform periodic activities deemed necessary by Ecology such as maintenance, repair, or remediation which might temporarily violate permit or water quality parameters, provided the activities are in accordance with WAC 173-201A-110 and Ecology is notified in advance of such activities. Such activities require Ecology's written approval prior to their commencement.

GENERAL CONDITIONS

G1. **DISCHARGE VIOLATIONS**

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control.

G3. REDUCED PRODUCTION FOR COMPLIANCE

In order to maintain compliance with this permit, the Permittee shall control production and/or all discharges—upon reduction, loss, failure, or bypass of the treatment facility—until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G4. NONCOMPLIANCE NOTIFICATION

If for any reason, the Permittee does not comply with, or will be unable to comply with, any of the discharge limitations or other conditions specified in the permit, the Permittee shall, at a minimum, provide the Department with the following information:

A. A description of the nature and cause of noncompliance, including the quantity and quality of any unauthorized waste discharges;

B. The period of noncompliance, including exact dates and times and/or the anticipated time when the Permittee will return to compliance; and

C. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the noncompliance.

In addition, the Permittee shall take immediate action to stop, contain, and clean up any unauthorized discharges. The Permittee shall also take all reasonable steps to minimize any adverse impacts to waters of the state, and to correct the problem. The Permittee shall notify the Department by telephone so that an investigation can commence; the Department will evaluate both any resulting impacts, and the corrective actions taken, to determine whether additional action should be taken.

In the case of a discharge—whether subject to an applicable toxic pollutant effluent standard under Section 307(a) of the Clean Water Act, or which could constitute a threat to human health, welfare, or the environment— 40 CFR Part 122 requires that the information specified in Section G4, subsections A, B, and C (above), shall be provided not later than 24 hours from the time the Permittee becomes aware of the circumstances. If information about an unauthorized discharge is provided orally, a written submittal covering these points shall be provided within five days of the time the Permittee becomes aware of the circumstances. The Department may waive or extend the performance period of this requirement, on a case-by-case basis.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the conditions of this permit, nor is the Permittee relieved of the resulting liability for failure to comply.

G5. **BYPASS PROHIBITION**

The intentional bypass of wastes from all or any portion of a treatment works is prohibited unless the following four conditions are met:

A. The bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage*; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act, and is authorized by Administrative Order;

B. There are no feasible alternatives to bypass—such as the use of auxiliary treatment facilities, the retention of untreated wastes, the maintenance during normal periods of equipment down time, or the temporary reduction or termination of production;

C. The Permittee submits notice of an unanticipated bypass to the Department, in accordance with Condition G4. Where the Permittee knows—or should have known—in advance, of the need for a bypass: Prior notification shall be submitted to the Department for approval—if possible—at least 30 days before the date of bypass (or longer, if specified in the special conditions);

D. The bypass is allowed under conditions determined by the Department to be necessary, to minimize any adverse effects. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible.

*"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. *Severe property damage does not mean economic loss caused by delays in production.*

After consideration of the factors above, and the adverse effects of the proposed bypass, the Department will approve or deny the request. Approval of a request to bypass will be by Administrative Order under **RCW 90.48.120**.

G6. **RIGHT OF ENTRY**

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located, or where any records must be kept under the terms and conditions in this permit;
B. Access, at reasonable times, and the Permittee shall allow the Department's representative to copy any records that must be kept under the terms of the permit;
C. To inspect, at reasonable times, any monitoring equipment or method of monitoring required in the permit;
D. To inspect, at reasonable times, any collection, treatment, pollution management, or discharge facilities; and
E. To sample, at reasonable times, any discharge of pollutants.

G7. PERMIT MODIFICATIONS

The Permittee shall submit a new application or supplement to the previous application when facility expansions, production increases, or process modifications will (1) result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants, or (2) violate the terms and conditions of this permit.

G8. PERMIT MODIFIED OR REVOKED FOR CAUSE

After notice and opportunity for public hearing, this permit may be modified, terminated, or revoked during its term for cause including, but not limited to, the following:

A. Violation of any terms or conditions of the permit;
B. Failure of the Permittee to disclose fully all relevant facts, or a misrepresentation of any relevant facts by the Permittee, during the permit issuance process;
C. A change in any condition that requires either a temporary or a permanent reduction, or the elimination, of any discharge controlled by the permit;
D. Information indicating that the permitted discharge poses a threat to human health or welfare;
E. A change in ownership or control of the source; or
F. Other causes listed in 40 CFR 122.62 and 122.64.

Permit modification, revocation and reissuance, or termination may be initiated by the Department or by request of any interested person.

G9. REPORTING A CAUSE FOR MODIFICATION

A Permittee who knows or has reason to believe that any activity has occurred, or will occur, which would constitute cause for modification or revocation-and-reissuance under Condition G8 or 40 CFR 122.62, must report such information to the Department so that a decision can be made on whether action to modify or revoke-and-reissue a permit will be required. The Department may then require submission of a new application. Submission of such application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G10. TOXIC POLLUTANTS

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant, and such standard or prohibition is more stringent than permit limitations upon such pollutant, the Department shall institute proceedings to modify or revoke-and-reissue the permit to conform to the new toxic effluent standard or prohibition.

G11. PLAN PREVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to

the Department for approval in accordance with **Chapter 173-240 WAC**. Facilities shall be constructed and operated in accordance with the approved plan.

G12. **OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. **COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G14. **ADDITIONAL MONITORING**

The Department may establish specific monitoring requirements, in addition to those contained in this permit, by Administrative Order or by permit modification.

G15. **REVOCATION FOR NONPAYMENT OF FEES**

The Department may revoke this permit if the permit fees established under **Chapter 173-224 WAC** are not paid.

G16. **REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters, shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G17. **DUTY TO REAPPLY**

The Permittee must reapply, for permit renewal, at least 180 days prior to the specified expiration date of this permit.